



THOMAS G. NEWMAN,
EDITOR.

Vol. XXVII. March 19, 1891. No. 12.

Editorial Buzzings.

Mr. R. R. Ryan has gone from Nebraska to Oregon, where he will more extensively enter into the pursuit of honey production.

Remember the *sad* experience of last season! Every one should order all the Supplies necessary for the Apiary *at once*, and avoid "the rush." The delays and annoyances of last year should teach a valuable lesson in this line.

Congress has adjourned. Among the unsuccessful measures, we mention the "Paddock pure-food bill," providing for the branding of all food compounds and adulterations. This ought to have become a law, but among the 14,033 bills introduced in the House, and 5,129 in the Senate, it was lost. In the Fifty-first Congress, just adjourned, the largest mortality occurred; three Senators and twelve Representatives having died during the term.

The Illinois Legislature having elected a United States Senator, will now begin its routine business. The appropriations for the World's Fair will be brought up at an early day. The State Bee-Keepers' Association asks for \$5,000 for its Columbian Fair exhibit. Now it will be necessary for every bee-keeper in the State to write to his Representative and Senator *at once*, asking them to vote for the appropriation. Do it now, before you forget it.

While Dr. Miller has induced brother Hutchinson to substitute "I" for "we" in his editorials in the *Review*, we observe that in *Gleanings* the more desirable "we" has obtained the endorsement of Ernest, on account of the plurality of editors. It looks much better every way, and has the endorsement of many centuries.

Report of the Toledo Convention.—Some have inquired why the Toledo Convention report has not yet been published. We reply, because the Secretary, Miss Dema Bennett has been laid up with *La Grippe*, and has been unable to write it out. We received the report of the first day's sessions after this week's JOURNAL was filled up. It will appear next week, and the rest of it as soon thereafter as possible.

The Cold Weather of the past week has been general all over the continent of North America. Even Texas reports the coldest weather within the memory of the oldest inhabitant. This retards Spring weather, and will probably prevent the early budding of fruit-trees, and the consequent danger of damage to them by late frosts. If pleasant weather prevails during fruit-bloom, the bees will obtain considerable honey for brood-rearing, and in return will fertilize the blossoms, and plentiful crops of fruit will be the result. We hope for such a favorable condition of things.

The Illinois State Association.—In a recent letter from Dr. C. C. Miller, he remarks thus:

I was sorry that I could not attend the convention at Springfield, but was not able at the time to sit through a convention, if an air-ship had carried me there. I do not know what is contemplated as to future meetings, but I think the arguments given on page 319, by Mr. Heddon, well worthy of consideration. There may be stronger arguments in favor of meeting at Springfield, and it will be well for some one familiar with the ground to state the case. My own opinion is, that we would have larger conventions at Chicago, but "the wish may be father to the thought."

C. C. MILLER.

Nothing was said about any place for holding conventions, except that the next meeting is to be held at Springfield in December, when the other farmers' meetings are held.

Illinois Exhibit at the World's Fair.

Mr. C. P. Dadant offers the following suggestions concerning the apiarian exhibits of the State of Illinois, at the World's Columbian Fair. These remarks will supplement what we gave last week on the same subject-matter as reasons for asking for an appropriation, on page 342:

In the consideration of the profits derived from bee-keeping by the State, it is most important to state that bee-culture is an industry which requires but little capital, and which, however, takes from territory already occupied, a very valuable product which would otherwise be wasted. There is no other production of the farm, to my knowledge, which can make so valuable a claim. Millions upon millions of pounds of honey are wasted every year, among meadows as well as in the swamps, for want of bees to gather it, and the only thing that is needed to gather those wasted sweets is encouragement to the pursuit of bee-keeping.

Congress has seen fit to allow 2 cents per pound to producers of sugar, and we can see no reason why producers of honey should not be similarly encouraged. Their pursuit is of more practical importance than that of sugar-growing, for they need no specially cultivated lands for their purpose.

In regard to the use to be made of the money solicited from the State, I think that provisions should be made for a bee-exhibit, an implement exhibit, and a product exhibit, which ought to be placed under the direction of three able apiarists, and may be arranged to be placed in the same location with bee-exhibits of other States if necessary. But as Illinois is the State in which the Fair is taking place, Illinois should also be the State to make the largest and best display. I think exhibits should be solicited from apiarists all over the State, and taken care of by State provision, although they ought to be furnished free of charge, and the name of each exhibitor should be placed upon his goods.

A well-made exhibit ought to encourage the pursuit, as well as to do honor to our State before the world. It will not be difficult to make a beautiful Show, if we let all apiarists know that their goods will be well taken care of.

Mr. Dadant also suggests that honey be provided sufficient to give a taste to all who desire to sample the honey of this State.

The consumption of honey would be much greater, if it was not for the prejudice that a great many people entertain in regard to the purity of our honey. It would be a very important point to have men to represent our industry at the Fair who understood the honey question, and who would be able to enlighten the visitors as to the quality and purity of granulated honey. Large quantities ought to be donated by bee-keepers at large for the purpose of allowing the visitors to taste this product, as was done at London by the Canadians. There is a great benefit to be derived by bee-keepers from such a course.

Hive and Frame Clamp.—G. T. Gunn, of Wall Lake, Iowa, has sent to our Museum one of his hive clamps. It is very substantial, and holds a hive, or frames, together with a vise-like grasp. He describes it thus:

It is made of wood and iron. There is no need of cleats on the side-board of the hive, as the clamp holds the board firmly to the frames and keeps the board from warping. It also stops robber-bees from entering the cracks, and acts as an end-board, keeping the sun and rain from the frame-ends. It will fit a hive of any depth.

Basswood or Linden Trees.

The American basswood tree excels in beauty almost all others, and it is well known that it furnishes a large amount of excellent nectar.

Its rank, thrifty growth, large, glossy-green leaves, delightfully perfumed flowers, adaptability to almost any soil and climate, and the ease with which it can be cultivated, make it one of the most desirable for lawn or lane. It is easily propagated from the seeds or cut-

by a wood engraving, and we give the result below.

The same thing is what the Canadians call "linden," and we across the line, as a general rule, term it *basswood*. There is no difference, but climatic influences have their effect upon it. Among the hills of New York State, the leaves assume mammoth proportions. I measured one that was 14 inches long. While this leaf was among the largest, yet the leaves were, on the average, about twice the size of those in our own locality.

In Illinois I noticed that the basswoods seemed to be less thrifty than in Ohio. The leaves seemed to be smaller, and



AMERICAN BASSWOOD, OR LINDEN.

ings, and can be transplanted with certainty, and may be obtained with little trouble. It blooms in early July, and yields a white, aromatic honey, of superior quality.

In *Gleanings* for Feb. 15, Mr. Ernest R. Root gives an engraving of it (which is here reproduced), and thus remarks concerning it:

Our artist, who was looking over some beautiful plates in a standard work in one of our public libraries, accidentally ran across a representation of basswood. It was so accurate that we instructed him to copy it, as faithfully as he could,

the bark of the trees of a little different appearance.

The engraving represents quite accurately the typical forms, however. The European variety has smaller leaves, and differs from *Tilia americana* in a few other minor respects.

It is rather to be regretted that this tree is not more plentiful than it is. It is one of the main stays, where it grows, of the honey-producer, and one of the most valuable woods in manufacture. It will hardly do for outside exposure to the weather; but it is admirably adapted for packing-boxes, and is used in immense quantities in the manufacture of furniture, forming the bottoms and sides of drawers, the backs of bureaus,

dressing-cases, etc., and it is also employed extensively in the manufacture of paper.

It has often been said that we are cutting off our own noses in using it for one-piece sections—that we are “killing the goose that lays the golden egg.” Well, it is true that apiarian-supply dealers may use quite a little; but still, the amount that *they* use is very insignificant in comparison with that employed by furniture makers, packing-box concerns, and paper makers.

After all, there is one redeeming feature—basswood is a very rapid grower. If basswood will replace itself in ten, or even twenty years, so that it can be used again for lumber, there is yet hope that it may continue to bless the bee-keeper.

Father Moore—he was familiarly known by this name by a large circle of acquaintances—has departed this life. We mean William W. Moore, of Gillett, Clay county, Iowa. He died on Oct. 2, 1890, at the advanced age of 78 years. His brother, Peter M. Moore, sends us a photograph, and the following concerning our deceased friend:

His health had been failing for three years, although he had been able to do the principal part of the work in his apiary. Last Spring he made 40 new hives and their frames, but in September was compelled to relinquish his work to others. He was a great lover of bees when a young man, and reared black bees for several years, in Ohio, and experimented on different patterns of hives.

When he came to Northwestern Iowa, 24 years ago, he brought the first bees into the Little Sioux Valley. They were black bees. He lost his first bees soon, they being injured in shipping, having to be carried 75 miles in a wagon. His second effort was successful, but he lost all his colonies the second Winter, not having become sufficiently acquainted with and prepared for the rigors of this climate.

Then he secured another start of Italians. With these he had fair success, and imported a queen from Milan, Italy, thinking to improve them, but lost her, and all but three of his colonies, in the hard Winter of 1880. Then he bought two more colonies.

Being so isolated, he kept his strains pure, and increased his colonies from 50 to 80—all he cared to keep. These bees were indeed his pets.

His location was in a native grove, on the Little Sioux River, and, perhaps, had some advantages over the surrounding prairie. But his success was encouraging to the people on the prairie, and he supplied them with a start in the business, within a large circle. He was an ardent student, and educator in the science of apiculture, being our oracle on bees, and had placed delicious honey, extracted and in the comb, before the people in so many meetings and conventions, and in the markets here, in such a way as to prove its value over the sweets of commerce, and he so firmly established its purity, and his honesty, that hundreds of people wanted Father Moore's honey.

He was much attached to the AMERICAN BEE JOURNAL and its editor, and had such a fraternal feeling for all bee-rearers, and writers on the subject, that I take pleasure in sending his photograph.

PETER M. MOORE.

La Grippe holds almost universal sway in this locality. Every mail brings intelligence of apiarists all over the country being within its terrible grasp. The editor of the BEE JOURNAL has suffered much from it this Winter, but fortunately not so much as he did last year. To show the strong *grip* it has on Chicago, the following from the *Herald* of the 12th inst. is appended:

Everybody has the grip. The disease is ravaging the city. The county hospital is full of patients with it. Pneumonia frequently follows it, and the mortality is great. West Side street carmen are all affected with it, and all the “extras” are being called into service. The police force is being thinned by it.

It is playing havoc at the Government building. Monday it seized upon about 25 letter-carriers, and Tuesday 40 were unable to report for duty. Seventy-five Postoffice employes were off duty on Tuesday. Altogether about 125 people employed in the building are affected.

Do You Want a Tested Italian Queen free of cost? Jacob T. Timpe offers one of his five-banded Golden Italians as a present for the first order for his Potatoes, from any State. This is a rare opportunity to obtain a valuable Queen. See our advertising columns.

Queries and Replies.

Rag-Weed and Honey.

QUERY 757.—Does rag-weed produce honey in sufficient quantities to benefit the bee-keeper.—E. P. G.

No.—MRS. L. HARRISON.

I think not.—EUGENE SECOR.

I think not.—J. M. HAMBAUGH.

Not that I know of.—G. L. TINKER.

We do not have it in my locality.—J. E. POND.

Yes; for every drop of honey is a benefit.—A. B. MASON.

I never saw a bee on it. Its use is yet to be discovered.—A. J. COOK.

The bees gather a little pollen from it here, but no honey I think.—R. L. TAYLOR.

It produces an abundance of pollen, but, as far as I have observed, no honey.—M. MAHIN.

Not a drop here; but it produces lots of pollen, and, I guess, "hay fever," too, as it is called.—JAMES HEDDON.

No; it produces nothing but a very bitter kind of pollen, that the bees work on to some extent.—C. H. DIBBERN.

In my locality it produces "hay fever," but I do not think that it produces honey enough to "wad a gun."—H. D. CUTTING.

I do not think, from my observations, that it yields a bit of honey; but it does afford an abundance of pollen.—J. P. H. BROWN.

It produces large quantities of pollen; but I do not believe it gives much honey. Sometimes, however, pollen is of more consequence than honey.—C. C. MILLER.

Bees do not get honey from rag-weed, here. In some seasons they gather pollen from it; but if I could have my say, I would have every spear of it exterminated.—G. M. DOOLITTLE.

Rag-weed is good for nothing but to give the "hay fever" to some persons. I know it, for this vile weed compels me to go to Sturgeon Bay, Wis., every year, in August, to avoid the disease.—CHAS. DADANT.

Our bees gather pollen some seasons from the rag-weed, but it is not a common thing to see bees working on the bitter weed. Last season I saw my bees gathering pollen from rag-weed for only two or three days, and then I saw no more of it. The rag-weed secretes no nectar, in my locality, for if it did, my bees would not be idle, as they are, in July and August.—G. W. DEMAREE.

Though it yields pollen, it cannot be classed with honey-producing plants. It is a vile weed, and should be exterminated.—THE EDITOR.

The American Museum of Natural History in the Central Park, New York city, occupies a noble pile of buildings, the recent additions to which are just approaching completion. It is an institution in which every American ought to take pride. The most complete description of its treasures, and the educational work it is doing, is given with abundant pictorial illustrations, by Mary Titcomb, in the April number of Frank Leslie's Popular Monthly.

We Club the American Bee Journal and the Illustrated Home Journal, one year for \$1.35. Both of these and Gleanings in Bee Culture, for one year, for \$2.15.

Convention Notices.

The Southwestern Wisconsin Bee-Keepers' Association, will hold its next Convention in the Court House, at Lancaster, Grant Co., Wis., March 25, 26, 1891. All who are interested in bee-culture and convention-work are cordially invited to attend. The topics for essays and discussions were enumerated on page 183.

BENJAMIN E. RICE, Sec., Boscobel, Wis.

The 13th annual session of the Texas State Bee-Keepers' Association, will be held at Greenville, Hunt Co., Texas, on April 1, 2, 1891. All interested are invited.

J. N. HUNTER, Sec.

The 8th semi-annual meeting of the Susquehanna County Bee-Keepers' Association will be held at Montrose, Pa., on Thursday, May 7, 1891.

H. M. SEELEY, Sec., Harford, Pa.

The Fourth semi-annual meeting of the Missouri State Bee-Keepers' Association, will meet at Boonville, Mo., on Thursday and Friday, April 9, 10, 1891. There are quite a list on programme for essays, including some from ladies. A cordial and pressing invitation is extended to all bee-keepers, and their wives and daughters, and any other ladies, to attend the Convention. Rates have been secured at the two leading hotels for those in attendance. Come, and let us get acquainted, and have an interesting meeting.

J. W. ROUSE, Sec., Mexico, Mo.

Wavelets of News.

Essays at Conventions.

Short, pithy, well-written essays, suggestive of several good points, are always in place at conventions: long-winded ones, never. A long essay, however, may be valuable in proportion to its length. But it taxes the nerves a good deal more to listen to something read than something given off-hand, in animated, conversational style.—*Gleanings*.

Influence of Free Sugar on Honey.

After April 1 next, the present duties on foreign sugar, which average $2\frac{1}{4}$ cents per pound, will no longer be imposed, and a bounty of 2 cents a pound will be paid on sugar made in this country. This will certainly lower the price of sugar, and probably have some effect upon the price of honey, more particularly upon the lower grades of extracted honey, now used by bakers and other manufacturers. Comb-honey is a thing of itself; in one sense it has no competitor, in another it has. Cheap sugar will encourage the production of fruit preserves, and they will compete, to a certain extent, even with comb-honey. There is also another light in which this matter may be viewed. Sugar may become so cheap that it will be more profitable than ever to force all the white honey into the sections, and feed sugar for winter stores. I know from experience that, with the proper methods of management, and the right kind of feeders, this can be done very easily and cheaply. The obstacle in the way of using sugar for winter stores has been its high price.—*Review*.

To Keep Bees from Watering-Troughs.

Among some of the good things we learned at Keokuk, last Fall, was a little hint worth remembering, from A. N. Draper. He is an extensive honey producer—a man who owns several out-apiaries. Said he, "People have had a good deal to say about keeping bees away from watering-troughs. I will give you a secret that is worth them all. Take a weak solution of carbolic acid, and paint it around the edges of the trough, and then they will not bother your neighbors. If you get them out of the habit of visiting such places, they will stay away." We have used enough carbolic acid in

the apiary to feel pretty tolerably certain that this will work. Put this down in your note-book, and try it next season and report.—*Gleanings*.

Sweet Clover for Honey.

M. S. Roop, of Council Bluffs, Iowa, writes us that bees are wintering very well in his vicinity. He says: "I have reports from about 20 bee-keepers, and their loss will not exceed 5 per cent." "Do you have any of the sweet clover growing in your country, it is the best honey plant in America." "It is as much ahead of alfalfa as alfalfa is ahead of buckwheat."—*Nebraska Bee-Keeper*.

Only Straight Combs for the Market.

It does not seem as though very much of a summing up is needed upon the separator question. I think all will admit that only straight combs ought to be put upon the market. If the condition of the honey flow and colonies, or of the management, result in straight combs without separators, then they are a useless expense, otherwise they ought to be used. Combs need not necessarily be as straight as a board, but so straight that they may be readily removed from the case without injury. If a bee-keeper can secure nearly all straight combs without separators, and has a local market—in which he can sell direct to consumers—for the few bulged combs that he may have, separators would be a useless expense.—*Review*.

Dadant's Langstroth in French.

We notice, by the last *Revue Internationale*, that this great work of our esteemed and celebrated co-laborer is at last ready for the French-speaking people of the world. It will be ready for sale on the first of March, just as this reaches our readers. We are informed that it will not be simply a word-for-word translation, but an adaptation of the book as a whole to the people of France, Mr. Dadant's native country. We predict that it will create a great stir, if not a revolution, in at least some districts of France. We have not learned the price of the book here in America. The price is $7\frac{1}{2}$ francs in Nyon, Switzerland, at the office of the publication named above.—*Gleanings*.

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Pollen Gathering by Queenless Colonies.

A. N. DRAPER.

In a recent number in the Query Department, the question was asked, "Does a queenless colony gather as much pollen as one with a queen?"

The question was answered by most of the authorities in the negative, though one or two of the answers partly gave my experience. I never had a colony queenless any length of time in the Summer, without the brood-combs were almost ruined by being jammed full of pollen.

I do not see how so many of the noted authorities have arrived at their conclusion. Of course, as the quantity of bees in a queenless colony is rapidly lessening, there are fewer bees to bring in pollen. This is the only reason that I am aware of that can be advanced for a queenless colony gathering less pollen. But in proportion to the quantity of bees I believe they bring in more pollen than one with a queen.

A few years ago I was greatly troubled with an excess of pollen. I found nothing in either books or bee-periodicals to help me out of the difficulty, so I began investigating to ascertain under what condition of the colonies the nuisance was the worst, and how it could be avoided, and I am satisfied that I have pretty thoroughly solved it; at least for this locality.

Leave no colony queenless. There are only two other conditions under which bees will store an excess of pollen. Either the queen is worthless from age or some other cause, or there comes a heavy yield of pollen when there is no honey in the flowers.

Now, where there is a contracted brood-nest, and the surplus has been removed, this contracted brood-nest is almost sure to be filled with pollen, and very little brood is reared, no matter what kind of a queen is in the hive.

In this locality, where we have white clover (it usually ceases to yield about June 10 to 20), and nothing more until the latter part of August or the first of September, the small brood-chamber is a complete failure, unless we resort to feeding during the whole of July and August. I have experimented on dozens of colonies, and in every hive I contracted during white clover bloom, the bees

would fill the brood-nest with pollen during July, from corn tassels and horse weed; then, when the Fall flowers would bloom, there would not be bees enough to gather the honey. Then, again, the following Spring, if they had gathered barely enough honey to winter on, the pollen would be in the way of brood-rearing.

If there is any way of getting rid of it, except by rendering it into wax, I have never heard of it, and it is almost as much as the wax is worth to get it out of combs heavy with pollen.

Another trouble with the contracted hive is the wintering problem. My contracted brood-nest hives are hard to winter in, and I have noticed that nearly all the small-brood-nest advocates have trouble in wintering their bees.

Some lay the blame to too much pollen. If they would add to this, "and too few bees," they would have the wintering problem thoroughly solved, without resorting to sugar stores. I have yet to see a large brood-nest, on the "Dadant plan," with a vigorous young queen, overstocked with pollen, because there is lots of honey stored therein, and when the corn and horse-weed yield pollen, the empty comb, and that occupied with honey, is rapidly filled with brood; then, when the Fall flowers bloom, these hives are overflowing with young workers. There is a wonderful difference between them and a hive with a little, contracted brood-nest.

The following Spring, the difference is just as marked, for in this locality we have to make hay while the sun shines. Here, our crop of Spring honey is from maples, fruit trees, asparagus, and white clover, and frequently our honey weather is over by June 1.

A good, strong colony will breed up rapidly during March and April, while the colony in a small hive begins to get in shape by the time the crop is harvested.

If I was located where the white clover continued for a long time, or where there was a basswood yield, I might tolerate a small brood-nest. Just think, what a long time an apiarist has in which to get his bees in shape for a basswood crop of honey, and how a fellow has to hustle to get ready for a crop from raspberries and white clover by May 10.

With me, the best time to prepare for a clover crop is during July, August and September. The point is this: Keep vigorous queens, and see that there is honey enough in the brood-nest so that all pollen gathered will be used for

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Another trouble with the contracted hive is the wintering problem. My contracted brood-nest hives are hard to winter in, and I have noticed that nearly all the small-brood-nest advocates have trouble in wintering their bees.

Some lay the blame to too much pollen. If they would add to this, "and too few bees," they would have the wintering problem thoroughly solved, without resorting to sugar stores. I have yet to see a large brood-nest, on the "Dadant plan," with a vigorous young queen, overstocked with pollen, because there is lots of honey stored therein, and when the corn and horse-weed yield pollen, the empty comb, and that occupied with honey, is rapidly filled with brood; then, when the Fall flowers bloom, these hives are overflowing with young workers. There is a wonderful difference between them and a hive with a little, contracted brood-nest.

The following Spring, the difference is just as marked, for in this locality we have to make hay while the sun shines. Here, our crop of Spring honey is from maples, fruit trees, asparagus, and white clover, and frequently our honey weather is over by June 1.

A good, strong colony will breed up rapidly during March and April, while the colony in a small hive begins to get in shape by the time the crop is harvested.

If I was located where the white clover continued for a long time, or where there was a basswood yield, I might tolerate a small brood-nest. Just think, what a long time an apiarist has in which to get his bees in shape for a basswood crop of honey, and how a fellow has to hustle to get ready for a crop from raspberries and white clover by May 10.

With me, the best time to prepare for a clover crop is during July, August and September. The point is this: Keep vigorous queens, and see that there is honey enough in the brood-nest so that all pollen gathered will be used for

brood-rearing, as gathered. If the brood-nest is small, feed regularly until you get tired of it; then get large hives and give them a trial.

Upper Alton, Ills., Dec. 27, 1890.

Eastern Iowa Bee-Keepers' Convention.

FRANK COVERDALE.

The second annual convention of the Eastern Iowa bee-keepers met in Maquoketa, Feb. 11 and 12, 1891, and was called to order by President Kimble, at 1 o'clock p.m.

C. M. Dunbar, of Maquoketa, in the absence of the Mayor, welcomed the bee-keepers to the city.

He stated that if there was any one branch of agriculture that he knew absolutely nothing about, it was that of bee-keeping, though he was very fond of their product.

In the absence of L. M. Stewart, of Monmouth, President Kimble called on Frank Coverdale, of Welton, to respond to the welcome, which he did as follows:

Mr. President and Fellow Bee-Men: We can well afford to plant ourselves in this fair city and spend two days, and hold counsel and discussion on this important branch of agriculture. Maquoketa may well feel proud, not only of her grandeur in architecture, her wide spread system of water works, electric lights, stone pavements, but of her energetic citizens and surrounding countrymen. She has been favored on the north with a widespread belt of timber and waterpower to run her mills. We gladly welcome all to come and share our comforts, and thank you for your liberal welcome.

After which the roll was called, and the reception of members took place.

The Secretary's report was read and approved.

The election of officers was by ballot as follows:

President, Wm. Kimble, of De Witt; Vice-President, H. S. Bowman, of Maquoketa; Secretary, Frank Coverdale, of Welton; Treasurer, L. J. Pearce, of De Witt.

In the absence of A. T. Wheeler, of Roseville, an essay by N. S. Samenger, on "Which is the Best Race of Bees," was read, followed by a discussion.

Wm. Kimble said Syrian bees were irritable, prolific; good to rear queens from. Carniolans no better for honey; not so good for rearing brood. Italians rear brood just when wanted, and are not so cross.

Henry Stewart, of Prophetstown, Ills., wanted Italians, but in good seasons black bees were just as good.

Wm. Kimble stated that he had worked ten years with the black German bee; made no success of bee-keeping until he got the Italian bee.

Next was an address by J. M. Jacobs, which was of vital importance to all present, on Marketing Honey, in which he stated that bee-keeping was just in its infancy, and we have the best honey gathering vicinity except that of California; that extracted-honey was as good as gold in the bank, for it would keep year after year; that honey must be put up in fancy shape for the city market; that some man of the association should handle all the honey; would not put one pound of honey in the hands of commission men.

Henry Stewart, of Illinois, had no trouble in disposing of honey with a good salesman; combined and shipped by carloads; put end of sections to end of car, it will ride all right; he had small lots smashed to pieces.

H. S. Bowman had more honey than he could dispose of on the home market; in one instance he shipped 34 boxes of honey, and 11 were reported smashed; on correspondence he found that the railroad company was all right, and made complaint to the commission men, and got full pay for all. Small quantities of honey get broken more; he brands all his honey; has a good trade.

Mr. Kimble had large experience in shipping honey from one Fair to another; had very little broken.

Discussion of hives next came up before the meeting. H. Stewart uses 9 frames in 12½ inch, inside measure; does not want closed-end frames; has tried them; they handle bad in cool weather; where one keeps out-apiaries, and roads are rough, he thinks closed-ends would be good; does not use porticos on his hives, they will be in the way; when using self-hivers, wants loose bottom-boards; when he wants tight bottom-boards, uses butter-tub hoops; wants shallow frames for extracting.

A. C. Lias wants all his frames of one size, so if he has any drone-comb it can be taken from the brood-nest and placed in an upper story to be filled with honey to be extracted.

J. M. Jacobs would not put his honey in any can or barrel that had contained foreign substances.

A. C. Lias uses 60 pound tin cans for honey; sells his honey to a cracker factory.

Adjourned until 6:30 p.m.

EVENING SESSION.

Meeting called to order by President Kimble.

Essential Quality in Bees. President Kimble looks well after the working quality of his bees; rears a docile strain. He has had swarms on his place like hornets; would not rear any stock from such.

Wintering bees came next in order.

H. Stewart supersedes all queens that do not do good work.

WINTERING.

J. M. Jacobs puts blocks underneath on the bottom-boards, so as to allow bottom ventilation; winters in the cellar to save honey, if nothing more.

A. C. Lias did not think it healthy to winter bees under dwelling houses; would have his cellar off to one side; has 90 colonies; gives bottom ventilation.

Manville Tarbox, of Olin, says you cannot freeze bees if you keep them dry; thinks wintering bees in a warm place takes away their hardiness.

W. E. Coe lost most of his bees when the bottom-boards were closed; keeps a temperature of 45°; likes lime in his cellar to absorb dampness; has no trouble.

Adjourned until Thursday morning.

MORNING SESSION—FEB. 12.

The meeting was called to order by the President, and a communication from President Secor, of the State Association, was noted, and laid upon the desk until afternoon session.

The subject of wintering bees was continued.

Thos. O. Hines, of Anamosa, winters in his cellar with burlap over his frames; 45°; he had to take his bees out the first of last March, because he could not control the temperature; run too high, though his bees did well.

H. L. Pangborn, of Maquoketa, winters in a dry cellar 6 feet deep; loses no bees; he thinks his bees do better in chaff hives, but he does not like them for summer use.

B. Crevelin tilts his hives well forward; gives top ventilation.

H. L. Pangborn has no trouble since practicing top ventilation.

G. Brown winters out-doors; packs in sawdust; has no loss.

Thos. Large winters in the cellar with proper temperature; no upward ventilation.

H. Stewart winters out-doors; puts his surplus case on top; fills it with autumn leaves; has them placed close together, and packs straw around them; winters his bees successfully; lets the

sun shine on the fronts of his hives; he thinks that they rear brood much in early Spring, when treated as above; considers this of importance.

R. Reeding winters in cellars, with proper temperature; puts a nail under the honey-board for ventilation.

D. D. Hammond places on a burlap before carry them down cellar; would have his bees in a state of hibernation; does not want bees to rear brood while in the cellar; likes bottom ventilation.

E. Petch winters in a dry cellar; never loses a colony; no upward ventilation; proper temperature.

W. E. Coe's bees get weak in early Spring. Cool, damp weather is hard on them; thinks we must in some way overcome this.

PRODUCTION OF COMB.

H. S. Bowman thinks that honey doctors differ; he uses a 10-frame hive; wants Langstroth hives.

W. E. Coe has 10 and 8-frame hives side by side; can see no difference as to which produces most honey; thinks 8-frame handles more readily.

D. D. Hammond wants good queens, and plenty of heat and food while being reared.

Dilman Benton wants an 8-frame hive to produce comb-honey.

H. S. Bowman wanted to know what five-banded bees meant.

D. D. Hammond replied, "humbug."

At what price is foundation unprofitable?

H. Stewart thought for surplus honey he would pay \$5 per pound, rather than do without; would not use it in brood-frames.

It was thought foundation in sections was indispensable, even at more than \$5 per pound.

Many present preferred full sheets of foundation in brood-frames, and wired.

SECTION-CASES.

W. E. Coe wanted a combined case; would not re-pack.

Henry Stewart uses a case to protect his sections on all sides without a bee-space on top or bottom; has loose end-boards and follower. Remove these boards, and the sections remove easily.

H. S. Bowman thinks loose end-boards help to remove sections. He would re-pack all his honey for shipment and sort it; put his brand on it.

C. Reeding uses Pateson bottom follower board, and thumb-screws to tighten it.

Dilman Benton wants a case to hold six single tier wide frames, protecting the sections from all sides.

Thos. Large favors the same case; says he never saw any case that suited him so well.

The discussion of section-cases was a wide one. One gentleman from Illinois stated that this matter had, from time to time, been the cause of his bald head.

Adjourned until 1 o'clock p.m.

AFTERNOON SESSION.

Meeting was called to order by the President. Each member present enumerated his 1889 honey crop, which was of much interest, being about 80 or 100 pounds per colony, Spring count.

A large portion of the bee-keepers present were farmers. The question of alsike clover came up before the meeting, and was largely discussed with much interest. It was thought profitable for all farmers to grow it, who have deep soil. It was thought it should never be sown but with red clover and timothy—2 to 4 pounds per acre.

FEEDING BEES.

Thos. O. Hines feeds in combs; would not feed in bad weather.

H. Stewart has a back-entrance arrangement, so that the bees pass back into another hive, fitted up behind to hold the combs, and so robbers cannot get in.

CLIPPING QUEEN'S WINGS.

Byron Crevelin clips all his queens' wings; would not do without.

D. D. Hammond thinks the clipping of his queens indispensable; would clip both wings three-fifths of the tip of the wings.

Frank Coverdale clips the fan part of one wing; thinks that the queen is not so apt to go far away when swarming, as when she attempts to fly, the sound wing turns her head toward the parent hive. Thus, if you are not just on hand, the queen's chances are better not to get lost, but to return.

Henry Stewart says that the Alley self-hiver is a success.

The following resolution was adopted by the convention:

WHEREAS, The City of Maquoketa has seen fit to tender us the free use of their City Hall in which to hold our Bee-Keepers' Convention, we, the members of the aforesaid convention, do tender to the city our most sincere thanks, and to the citizens we do extend our hearty appreciation for their hospitality.

Signed by committee:

HENRY STEWART,
MANVILLE TARBOX,
T. W. LARGE.

The meeting was a busy one. Some of the essays had to be carried over till next session.

Invitations from Anamosa, Wheatland, De Witt, Davenport and Clinton were received, but after balloting the second time, De Witt was chosen as the place to hold the next meeting, and the convention adjourned.

The association now has a membership of 41 bee-keepers.

Members present represented 1,649 colonies, Spring count; Fall, 1,818.

Number of pounds of comb-honey, 14,435.

Extracted-honey, 5,200.

Total, 19,635.

Average yield per colony, 12 pounds.

Wax, 516 pounds.

ON EXHIBIT.

Henry Stewart, of Prophetstown, Ills., section-case and bee-escape.

D. D. Hammond, clipped queen.

H. S. Bowman, of Maquoketa, hive and section-case.

C. M. Dunbar, of Maquoketa, showed much interest in the meeting, and proposed to pay dues, although he did not keep bees, and by a unanimous vote, was elected an honorary member of the association.

Mr. Dunbar is Chairman of the Board of Trustees of the State Agricultural College, and extends to the bee-keepers of Eastern Iowa an invitation to correspond with the officers of that Department, and assured them that their wishes would be complied with.

Welton, Iowa.

Moth Millers and Foul-Brood.

AUGUSTINE LEECH.

The question has often been asked, "What is the cause of foul-brood?" When dead brood is found in the hive, if the apiarist will remove the brood-frame, and with a pair of pliers, pull the dead brood out of the cells, he will find the larvæ of the moth miller quite numerous, and they are the cause of the dead brood.

They will be from $\frac{1}{4}$ to $\frac{3}{4}$ of an inch long. They work in the base of the cells, and suck the food from the bee-larvæ, and they die.

On cool nights in May and June, the cluster draws in, leaving a space where the queen has deposited her eggs in the comb, and the moth miller enters the hive, and deposits its eggs in the same cells, and they hatch out together, and

when the food is exhausted, the larva of the miller crawls up beside the bee-larva, and cuts the hole in the capping of the cell.

Now, if the dead brood is removed from the comb, the colony will improve, but it will be better to take a comb of hatching brood from another colony and put in place of the comb which contained the dead brood.

I live about the middle of Ontario, and for 55 years have not had anything to contend with except the moth miller pest.

We have a law in Ontario relating to foul-brood; but before that law was passed I argued with Mr. McEvoy on the question of foul-brood, and he said it was chilled brood—now, it is neglected brood.

North Glanford, Ont.

Painting Hives to Prevent Dampness.

B. E. RICE.

In the last issue of the BEE JOURNAL is an article on painting hives on the inside, in order to keep dampness from penetrating the walls. This may seem all right to some, and especially those who have had no experience in the matter, but I have never found any difference in that respect, and I have used them both ways. Some years ago, I would not have thought of putting a swarm of bees into a hive that was not painted up in good shape, and especially on the outside, but of late years I have changed my mind, and do not paint them at all.

I consider it a loss of both time and money, and the only good it does is to protect the material they are made of, and, perhaps, make them last longer.

I believe that all painted hives are detrimental to bees, and especially so during the dry and hot seasons of the year, with the exception of one color—white. I have seen bees, during July and August, suffer terribly from the heat of the sun on painted hives, and they would crawl out and cluster on the shady side of the hive, while, on the other hand, a colony in an unpainted hive, keeps right on at work.

This plainly shows that the hive so painted retains the heat, and makes it too hot and sultry for them to remain on the inside, while the others are not so affected.

I have discarded all hives that were painted any dark colors, and especially red. I have, for the last three years, had better success in wintering bees in

unpainted hives than those that were painted, and the colonies in the unpainted hives were among the first each year to cast swarms.

I would suggest to anyone that has not had any experience with painted and unpainted hives, to take 2 colonies as nearly equal as possible. One to have a good, painted hive (not white), and the other an unpainted one. Both of them are to be placed in the sun, with no protection whatever, during the months of July and August, and note the difference, and report the same through the BEE JOURNAL.

In regard to damp walls in bee-hives, I do not see that there is any necessity of being bothered much in that way, if one takes pains in preparing his bees for Winter, and puts good mats over the tops of the frames, with a half-inch space between, so as to allow the bees to pass freely from one comb to another. The mats should be filled with some kind of porous material. Dry sawdust is good, and oat or buckwheat chaff, cotton batting, finely cut straw, excelsior, hair, and many other things would answer the purpose very well.

Then, with a well ventilated bee-house and cellar, there will be but very little danger of being troubled with dampness, as what accumulated in the hive would escape through the mat on the top of the frames.

But in case one should be troubled with dampness, and his ventilators would not remedy it, set in among the bee-hives three or four dishes that will hold about a peck of lime each; use unslacked lime. This will remedy the trouble in a great measure.

I should be glad, indeed, to have the opinions of other bee-keepers as to using so much paint, and if it is useless to use so much of it, we all want to know it.

Boscobel, Wis.

Apicultural School in Germany.

REV. S. ROESE.

A few months ago the BEE JOURNAL gave the figures in full of the amount appropriated by the different States in Germany, in aid of apiculture, the Grand Duchy of Baden taking the lead in point of liberality.

And now another move has been made by this enterprising State to make apiculture one of the most important branches of industry, and arrangements have been completed to establish a free school in the city of Eberbach, Baden,

where bee-culture will be taught to both young and old, to perfection in theory and practice. Tuition is to be free to all, and its courses are to be divided into three terms annually; one week's tuition to the elderly people, and two weeks for the younger people.

All applicants for admission must not be under 16 years of age, and of blameless character, and if not personally known to the Board of Trustees or officials, are required to present a certificate of character, signed by the Burgomaster of their respective city or town.

Each scholar is to provide his own board and lodging. At the close of each term diplomas will be awarded to the worthiest, who will also have their expenses—such as board and traveling outlay—returned, in part or in full. A Board of Directors, elected by the State Bee-Keepers' Society, with the Burgomaster of the city, will control the whole, and report annually the results to the Secretary of the Interior.

The various branches of tuition are as follows:

A.—1. The honey-bee. 2. The three species and their respective places in the hive. 3. The various races. 4. Diseases of bees. 5. The enemies of the bees.

B.—1. Plan of apiary. 2. Bee-hives. 3. Apiarian implements. 4. Literature.

C.—1. Management and care of bees in Spring. 2. Increase of colonies. 3. Care of new swarms. 4. Queen-rearing. 5. Preparation for Winter. 6. Successful wintering.

D.—1. Bee-pasture. 2. Surplus honey. 3. The history of apiculture.

With the above regulations one should conclude that Virgil, in his poems, and Aristotle, in his practice, had a glimpse of the advanced state of apiculture in the nineteenth century.

Maiden Rock, Wis.

Texas Apicultural Notes.

A. C. ATEN.

My bees are very much mixed—Cyprian, Italian, Syrian and black bees, the Italian blood predominating. The largest yield I ever had from one hive (about 300 pounds), was from a colony supposed to be a mixture of the three races first mentioned.

I once had a colony of pure Cyprians, but they were very cross, and drove me away from the hive twice, after which I became more careful. In about two

years the queen was superseded, and after that they gave me no trouble.

My bees, I think, will compare favorably with any I know of for the last eight years, averaging, each year, from 50 to 110 pounds per colony.

I have never owned an imported queen, but have had brood from imported queens, and also queen-cells from neighbors. I am pretty well satisfied that it is unnecessary, at present, to import queens, and think I have better bees than I can import.

I think, with friend Harmer (page 158), that we are as much entitled to a bounty of 2 cents per pound on honey, as the sugar men are on their product, as cheaper sugar will cause a reduction in the price of honey. This is rather a serious matter with honey producers, and a little bounty of 2 cents per pound would be quite a help to us.

We have no trouble, in this part of Texas, in selling granulated honey. No one ever doubts the purity of my honey, and I do not believe there is any adulterated honey sold here.

Some years ago, about the middle of February, I purchased 10 colonies of bees, which were about 15 miles distant. They were in the common box-hive (except one or two colonies, which were in patent hives, of no use to a practical bee-man). I put plenty of straw in the bottom of my wagon-bed, and, with a small bit, bored a number of holes in each hive, then put them in the wagon, on the straw, which closed them up so that not a bee could escape. I started for home, but had not traveled over a mile when the top of one of the hives, being quite rotten, was knocked off, and the bees began to come out by the hundreds. I jumped from the wagon, pulled the pin out of the double-tree, and got the mules away in less time than I can tell it, and, although the bees attacked me and stung me terribly, I got the mules away without getting them stung but a few times. A bee sting does not hurt me much, but I procured some soda and water, with which I bathed my head, and soon was all right. I could do nothing with the bees that day, however, so waited until night, then closed the hive securely, and had no further trouble.

We have no trouble here wintering bees, unless we let them starve, and I find it much easier to see that my bees have plenty of stores in the Fall, than to be examining them in the Winter. See that they are all right in the Fall, and one need not trouble himself much about his bees again until Spring. I have

never known any foul-brood in this part of Texas.

Fruit is just beginning to bloom, and bees are busy, and appear to be doing well. They have, however, been able to get pollen and, perhaps, a little honey for a month past, on warm days.

If any one having a good location for honey, will take an interest in bees, purchase a good manual on the subject of bees and honey, then study, read, and practice what he learns, he can succeed every time.

Round Rock, Tex., March 2, 1891.

Bees are Helpful to Fruit-Growers.

H. D. ALEXANDER.

I have a vineyard of three acres, and never knew a honey-bee to puncture grapes until some bird had pecked the berry first, or it had been cracked by wet weather, and I have watched them closely for years. They will alight on a cluster of grapes, after the honey flow is over, and if none of the berries have been punctured, or cracked, they will leave it, and try another cluster.

The bees never did any damage, but helped to clean out the cracked and punctured ones, for after their visits, the skins of such would dry up, and when the grapes were picked and assorted, they were dry and clean, whereas, had it not been for the bees, the cracked and punctured ones would have been wet and sticky, and must have smeared the sound berries and clusters. For these reasons I consider Miss Bee a helper, instead of a nuisance. I also have an orchard of apple, pear and plum trees, for them to work in, and I have never yet failed of getting a good supply of honey and fruit of the best quality.

I winter out-doors, in chaff hives, using kiln-dried sawdust and shavings for packing. Am well protected on the north and south, and am three miles from Lake Champlain.

My theory, in the care of bees, is to let nature take its course, and not disturb them more than can possibly be avoided, and I think they do better. The hardest month on bees, in this locality, is April.

I never fed bees until last Fall, when I gave those colonies that were short of stores, all the sugar syrup they would take.

Last Spring, I opened 15 colonies of of black bees, and found them solid with bees, and having plenty of stores. After having kept black bees for nine years, I concluded to try 10 colonies of Italians,

which I placed by the side of my blacks, making 25 colonies in all.

The blacks cast 3 swarms, and the Italians 6 in June and July, and 2 in August. The latter swarms were the best and heaviest, and I fed them upon unfinished sections. The latter part of September they went into winter quarters in 12-frame Bristol hives, and at this date, after a sharp, cold Winter, I find them still strong in numbers, and with plenty of supplies.

From 23 colonies I took 1,100 pounds of saleable comb-honey, which sold at an average of 17 cents per pound. My black bees stored 2 pounds of comb-honey for every pound stored by the Italians, and capped it in nicer style. I find the Italians to be better breeders than the blacks, but the blacks are better honey gatherers.

The first honey I took, in the latter part of June, was amber-colored instead of white, and the capping was yellowish, which gave it the appearance, at the first glance, of being dark honey, but my customers did not exactly like it, and the color hurt its sale.

The honey flow began well, but in two weeks it ceased, and no more honey, white or dark, was gathered during the season.

Charlotte, Vt., Feb. 28, 1891.

Uncle Mose Stirs up the Bees.

M. DOBBINS.

I had purchased 3 colonies of bees, and placed them in the garden behind some rose bushes, to conceal them from the boys.

When the weeds began to get too thick in the garden, I employed Uncle Mose Brown, and old negro about 50 years of age, who would be perfectly bald, except for a little fringe of wool, reaching from one ear around the back of his head to the other ear.

Uncle Mose has a violent temper, and as he usually wears a hat without any crown, the boys annoy him by pelting him on the top of the head with small pieces of putty, blown from a tin tube, whenever opportunity offers.

He began hoeing the potatoes, and as the ends of the rows were close to the hives, I concealed myself behind the fence, to see if the bees would molest him.

When he was within about 40 feet of the hives, he suddenly dropped his hoe, and, clapping one hand on his bald head, exclaimed, "Hi, yi, dar, you lil'e

white rascals; jus' hol' on. Ouch! Lawd-a-massa! I kin stan' putty an' blue clay; but—gosh all hemlock, how many is dar ob you? W'en you gits to frowin' carpet tacks, an' shingle nails, an' grabble stones, I'se got to do sumpin'."

Reaching down, he secured a handful of stones, and began to throw them into the rose bushes, exclaiming, "Git outen dat, you rascals!"

This so enraged the bees, that they ceased their labors, and turned their attention to Uncle Mose. The old fellow soon discovered his mistake, and jumped over the fence into the yard where we kept the goat. This aroused Billy's anger, and he resented the intrusion by butting Mose over the fence into the road.

"Golly, dat mus' a bin a drone," said Unce Mose, as he landed on all-fours; "hope de queen won't git er whack at me; if she do dar won't be any hope' fur me in de nex' wurl, fur cussin' am was dan stealin' mellins an' chickens. Guess I'll go home, an' let dem bees alone, fur dey is wus dan de boys; 'sides, I doan feel like hoein' in er gyarden, to-day."

Greenfield, Pa.

Foreign Method of Transferring.

ADRIAN GETAZ.

In answer to the inquiry regarding the best method of transferring bees, I offer the following, which has been known in France and Germany about 20 years, but not in America nor England:

Fill the new hive with frames full of foundation, and place it on the stand where you wish it, after having removed the old hive. Drum the bees out of the old hive into a box—at least enough of them to be sure that you have the queen. Put the bees and queen (either the old queen or a new one, if you want a change of queen) into the new hive. Put on the new hive a queen-excluder, and on top of the queen-excluder the old hive.

In 21 days the brood in the old hive will be hatched out, and the bees can then be drummed into the new hive, and the old hive and its combs disposed of as you like.

One difficulty is, that both hives may not be of the same size; the old hive is, we will say, smaller than the new one. In that case, get a board larger than the new hive, make a hole in it as large as possible, but smaller than the old hive; tack your queen-excluder on that hole, and put the board between

your hives, then stop all the openings except the entrance of the new hive, and you will have it. This is better than the Heddon method, in that it keeps the bees together, practically, in one hive; while by the Heddon method you make (for the 21 days necessary to the hatching of the brood) two very weak colonies out of one, probably not very strong. In quite warm weather, and with plenty of honey coming in, the difference would not amount to much; but in time of scarcity or cold weather the whole colony might be lost when using the Heddon method, either by robbing or by inability of the bees to keep up warmth and work up, while by the above plan there would be no danger.

I would not advise cutting the combs of the old hive and fastening them in the new frames. It is too much work, too much honey spilled, too much brood killed by cutting the combs, or trying to straighten them when they are crooked. Besides, you will often start robbing during the proceedings, and have a "big time" with it; and, finally, your combs will not be as good as those built on foundation, no matter how careful you may be.

Knoxville, Tenn.

Greatest Value and Least Cost.

F. D. LACY.

The methods we adopt in the different vocations we follow, are apt to be the easier way to ourselves, although, perhaps, a hard way to others. It is easy to do as we are accustomed to doing, though handier methods might be devised.

It is not always prudent to throw aside the old plan to adopt the new, and the good qualities of the new should be well established before anyone should venture to make the change.

Mechanisms to facilitate labor, if simple, are easy to manipulate, and cheaper to buy, and usually prove most satisfactory. Beware of complicated machinery, as there are many pieces to handle, and much to get out of order, and when one piece is broken, the remainder is liable to become scattered and lost.

A good hive is as necessary to the bee-keeper as a good barn is to the farmer; for the bee may gather honey, and the soil may produce good crops, but unless the products can be properly secured, neither are made available.

A farmer may have a barn economically built, yet answering every purpose,

while, in attempting to make one overly handy, he would go to needless expense, and have many things in the way that would seldom be required.

It is the same with bee-fixtures. The working capacity of the bee depends but little upon the character of the hive, and the hive that can be easily handled, and the proceeds made most available, is good enough.

It will not pay to be running after all kinds of hives that are advertised, for different men like different things; besides, in too many cases, there is some one who has an ax to grind.

The bee-business, in a good locality, may prove profitable some years; yet there are so many partial failures that it behooves every one to invest prudently and carefully in bee-fixtures, and it hardly justifies any person, in an ordinary location, to depend wholly upon such a business.

What is economy, is a question that different persons will answer in different ways. Therefore, it is well for each one to study the questions for himself, and determine what is best for him to do.

Nirvana, Mich.

Bee-Notes from California.

S. L. WATKINS.

We are having fine weather in this part of California, at present. Bees are at work, and rapidly breeding up. Manzanitas and alders are in bloom, and several species of wild flowers; and if the warm weather continues a few days, the mountain sides will be clothed with a waving sea of golden compositæ.

Beginners sometimes discover a colony that they suppose queenless, and introduce queens, only to have them killed, or place brood of the proper age in the hive, and find that the bees do not start queen-cells. Such colonies must contain a queen of some kind, usually a virgin that has defective wings, or defects of some kind, that have prevented her from being fertilized.

It is sometimes pretty difficult to find such queens, especially with black bees, but by using one of Alley's combined drone and queen-traps at the entrance, and shaking the bees in front of the hive, you generally succeed in catching her.

We have had very little rain this season, but still there is plenty of time for heavy storms. If we have plenty of late rains we generally entertain hopes of a good honey crop. At our elevation

—4,000 feet above sea level—the dry seasons do not affect the honey bloom to such a great extent as in the lower counties.

One season, I remember, it was extra dry here, and it seemed very doubtful if we were going to obtain any honey at all. All early plants dried up, and turned to dust beneath the feet, as if baked in an oven. At the very driest time of the year the hartshorn, a slender, unobtrusive little plant, forced its way out of the parched ground, and made its appearance in patches miles in extent on the more exposed portions of the ridges, and the plant was clothed in a dense bloom.

The bees gathered plenty of honey to winter on, and furnished a little surplus besides. Another plant that delights in extra dry seasons is the *Hemizonia virgata*. Its home is in the valleys and foot-hills of California. It is quite a showy plant; the ray and disc flowers being yellow, and the stamens purple. It blooms until November, being the last link in the floral chain of honey plants in the foot-hills and valleys. Some seasons it has a showy multitude of bloom, but it will not equal hartshorn as a honey plant.

Last Fall, in the foot-hill portions of this county, I noticed a great deal of the so-called honey-dew on the yellow pines—some trees were just glistening with it. All bees within range of this kind of pine, gathered quite a Fall crop of honey; but it was of very poor quality, and fit for nothing but the bees to winter on.

Grizzly Flats, Calif.

WORK AND PLAY.

Three little busy bees,
Tolling hand in hand,
"Buz-a-buz, work-a-work,"
Sang the careful band.

Three little butterflies
Chanted thus together—
"Never work, only play
'Mid the sunbright heather."


Sang three little children—
"Neither song is right:
Work and play, play and work,
Make the earth so bright."

The Convention Hand-Book is received, and I am well pleased with it. Every bee-keeper should have a copy.

CHARLES WHITE.
Farmers' Valley, Nebr., Mar. 3, 1891.

CONVENTION DIRECTORY.*Time and place of meeting.*

1891.
 March 25, 26.—S. W. Wisconsin, at Lancaster, Wis.
 Benjamin E. Rice, Sec., Boscobel, Wis.
 April 1, 2.—Texas State, at Greenville, Texas.
 J. N. Hunter, Sec.
 April 9, 10.—Missouri State, at Boonville, Mo.
 J. W. Rouse, Sec., Mexico, Mo.
 May 6.—Bee-Keepers' Ass'n. and Fair, at Ionia, Mich.
 Open to all. Harmon Smith, Sec., Ionia, Mich.
 May 7.—Susquehanna County, at Montrose, Pa.
 H. M. Seeley, Sec., Harford, Pa.

 In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—P. H. Elwood....Starkville, N. Y.
 SECRETARY—C. P. Dadant.....Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon..Dowagiac, Mich.
 SEC'Y AND MANAGER—T. G. Newman, Chicago.

Bee and Honey Gossip.**Poplar Tree a Honey Producer.**

On page 294 is an inquiry by P. D. Ellingwood, in regard to the value of the poplar tree as a honey producer. If he will refer to pages 290 and 291 of Root's A B C of Bee-Culture, he will find a detailed description of the tree to which I think he has reference, under the name of tulip tree, whitewood or poplar. The name poplar is applied to other trees, beside the "tulip," in some sections of the country, which do not produce honey. But the tulip is certainly a great producer of honey, and of fine quality in this region.

Slippery Rock, Pa. T. C. KELLY.

Keeps Italian Bees Exclusively.

The Winter in this locality has been mild up to this time, and I hope the bees will winter without much loss. They have wintered well so far. I have 48 colonies of Italian bees, Fall count, which averaged about 20 pounds each of surplus honey, last season. I have always wintered bees on the summer stands (one-third of them in chaff hives). Bees were at work on Feb. 16 and 17, on the maples, but could not work Feb. 18, on account of rain and sleet nor have they

worked since. I used to keep black bees, but lost them all in the Winter of 1884. I then had 45 colonies, in box-hives, and they had plenty of stores, but the cold weather did the work. Then, I purchased a colony of Italians, in a frame hive, for \$10, and they have increased very rapidly, and now I keep Italians exclusively. I use the Simplicity hive, which I find easy to handle. The BEE JOURNAL is the best bee-periodical in America, and I find that I cannot do without it. It is an absolute necessity in the apiary, and all bee-keepers should subscribe for it. AREND NYHUISE.

Chandler, Ind., Feb. 20, 1891.

Bees were Smothered.

I have been examining and making inquiries regarding the prospects for white clover during February, and think it is generally alive. The ground has been covered with snow a good deal of the time since Jan. 1, and I think the clover has been benefited thereby. Another heavy fall of snow occurred yesterday, and it is now about a foot deep on the level. Weather clear, but very cold to-day, the mercury being 4° below zero this morning. Examined my bees on March 4, and think that out of 148 colonies, 4 are dead. The entrance to 3 of the hives were stopped up with bees, and I think those colonies were smothered. My bees are in the cellar.

W. C. NUTT.

Murphy, Iowa, March 9, 1891.

Claims the Championship.

I have taken the AMERICAN BEE JOURNAL for eleven year, and often see in it accounts of large yields of honey. I have kept bees for the past 25 years—for 12 to 15 years in Langstroth chaff hives—and for the last 7, have worked principally for extracted honey. I used 10 frames in the brood-chamber, but tried 7 in part of the hives for 2 or 3 years, and as they seemed to do the best in them, I now use 7 frames in all my hives. In the Spring I proceed as follows: As soon as all of the frames are well covered with bees, take out one or two frames of brood, put in their places frames filled with comb (keep plenty such on hand), put on queen-excluding board, then a second story, putting the frames of brood in that, and put in two or three frames of comb, filling the remainder of the space with full-sized dummies, and as soon as they need it, give them more frames of comb. Extract

about July (frames are not filled sooner), and again in the Fall; this time, take all the honey out of the second story, and if they do not have enough honey in the brood-chamber to keep them through the Winter, feed granulated sugar. I do not average over one swarm from 3 colonies, and the yield of honey and the amount of sugar fed, for the past four years, is as follows, in pounds:

	Ext.	Comb. Sugar.
June, 1887, to June, 1888	425	200
June, 1888, to June, 1889	410	125
June, 1889, to June, 1890	450	150
June, 1890, to date	525	225

I expect, next Spring, to feed at least 75 pounds more of sugar. My poorest season was from June, 1883, to June, 1884; the yield was about 10 pounds of comb-honey, and I had to feed 415 pounds of sugar to supply the bees with stores for the Winter. My bees are Italians, black and hybrids, average hybrids; at present two-thirds are pure Italians. I had 34 colonies last Spring (had only one swarm), but, last Fall, reduced to 27 colonies, and packed outdoors—have not examined them since. Think my average Spring count is about 25 colonies, and that my average yield, per colony (less sugar fed) has been about 10 pounds. If any one can give a poorer report, I would be pleased to hear from them, as I do not feel very anxious about keeping the championship. Have seen, or heard from, a dozen or more bee-keepers in this part of the State, and they all report that the season of 1890 was the poorest that has been known in Northeastern Pennsylvania for years.

P. P. CARTER.

Scranton, Pa., Feb. 25, 1891.

White Clover Prospects.

Since I began reading the BEE JOURNAL, I have had better success with my bees than ever before. My 10 colonies are in fair condition, but shall have to feed them. I have wintered on the summer stands, packed in clover chaff and leaves, the last two Winters, with very good results so far. Prospects for white clover are very good, at present.

LEE POWELSON.

Batavia, Iowa, March 6, 1891.

Recovering Swarms from Trees.

For the purpose of capturing swarms that may alight in tall trees, I have a long cane fishing rod, with a strong iron hook on the end, and a wire swarming-box, on a 20-foot pole. I climb the tree with the swarming-box, and hold it as

near under the cluster as possible, while an assistant, by means of the hook on the fishing pole, catches the limb on which the bees are clustered, and, with two or three vigorous shakes, lands them in the swarming-box. Then I descend, and shake them into a hive. My swarming-box had a cover, but I considered it a nuisance, and removed it. The bees were apt to cluster around the rim, until it became impossible to close down the cover without crushing many of them, and, if I did not close it, the cover would fall while pouring the bees into the hive.

JOHN BURR.

Braceville, Ills.

Poor Honey Crop.

In this section, last season, the honey crop was not more than half as good as usual. Bees are in fine condition, the colonies being strong, with plenty of stores. The Fall flow of honey was of such short duration that the bees were not reduced by work. The Winter, so far, has been very moderate.

A. L. BEACH.

Pineville, N. C., Feb. 2, 1891.

Preparing Sections for Bending.

If Mr. E. C. Eaglesfield will throw an old wet bag across the crate of sections, a few days before he wishes to bend them, they will be all right. I put up 2,000 in that way last Summer, and did not break a good one. I use beeswax and rosin, kept hot, over an oil stove, to fasten the joints, and with a machine I can easily put up a hundred in an hour.

Wilcox, Pa.

A. T. ALDRICH.

Bees in Good Condition.

In the Spring of 1890 I had 19 colonies of hybrids. I had wintered them on the summer stands, packed on three sides and top with oat chaff, the cap being filled with forest leaves. They began rearing brood very early, and by April 1, the weak colonies were entirely destitute of stores, and I fed them with granulated sugar, thus saving all but one colony, which swarmed out, and "took to the woods." By this time the fruit bloom had commenced, but the weather was cold and wet, which prevented the gathering of much honey, and stopped brood-rearing. Owing to dry weather, the white clover did not yield as much nectar as usual, and the basswood lasted but a few days, with a very light yield. I then took from the

whole number of colonies, 400 pounds of comb-honey in one-pound sections, and 400 pounds of extracted-honey, of fine quality, all of which has been sold in the home market at from 15 to 20 cents per pound. The Fall flow of honey gave the bees plenty to do. Bees are wintering in good condition on the summer stands, with the exception of some late swarms, which are in the cellar.

JOHN W. BEATTY.

Excelsior Springs, Mo., Mar. 19, 1891.

Very Little Surplus.

I am a "tenderfoot" in the bee business, but I have learned that bees will not live long without something to eat. I have learned, also, that every man who has queen-bees for sale has the best workers, and the gentlest bees in existence; but mine are not that kind. Most bee-keepers in this vicinity winter their bees on the summer stands. We had very little surplus honey last year, and I think some of the bee-keepers will not have a very large surplus of bees next Spring, for we have had very severe weather since ground-hog day. My bees are in the cellar, and are wintering first rate.

O. H. STEVENS.

Elk Point, S. D., March 10, 1891.

Trade-Mark Fallacy.

The question of a trade-mark for bee-keepers' use, as a means of protection, seems to me as bearing a long way in the wrong direction, because in bee-keeping, like all other occupations, frauds will be found who want to use the good name of some one, to cover up their own evil deeds. It is an utter impossibility for any one association of persons, as widely scattered as the bee-keepers of this country are, to have any mark or guarantee of purity, which can be used promiscuously by its members, without the employment of a competent and thoroughly honest inspector of the product, before this mark or guarantee can be placed upon the article for sale. Should such a mark be found upon an impure or inferior article, it would, of course, stamp any article bearing the same mark as of the same class, and I am not prepared yet to brand the whole bee-keeping fraternity as frauds. I have no doubt of the good intentions of the advocates of a trade-mark, and think that upon further consideration, they will be convinced it is a scheme which cannot be a success.

A. H. WADHAMS.

Torrington, Conn.

No Use for the Trade-Mark.

In regard to the trade-mark, the less said about that the better. I have a trade-mark which has served me well, and it grows more valuable each year. I put it on every section. It is as follows: "L. Eastwood, Waterville, O." I have a way of preparing sections for bending, that I like better than any other. Spread a paper on the cellar floor, place the sections on the paper, and in the morning they bend easily, and without breaking. I put them together as fast as I can handle them, using a toy mallet. I require no device for squaring them, as I can do that with my eye. After the grooves have been wet with hot water, they do not bend in proper shape so easily. My bees are very quiet in the cellar, with the temperature at 50° to 55°. I do not think there is any danger of keeping them too warm. Last Winter the mercury often went down to 50°, and they never wintered better.

L. EASTWOOD.

Waterville, O.

Home Market—No Trade-Mark.

I think Query 755, on page 313, is a very foolish one. What is the difference whether the queen stands on her feet, head or tail when you clip her wings, so you clip them? Since I have kept bees, I have never sold a pound of comb-honey for less than 15 cents, nor extracted for less than 12½ cents. I generally sell in the home market, and would not give a snap of my fingers for a trade-mark. Sell nothing but good honey, and then people will buy again. I have 18 colonies of bees. The prospect for white clover is good.

MATTHEW REBHOLZ.

Kane, Ky., March 6, 1891.

Apiarist's Paradise.

This country, along the coast for a distance of 60 or 70 miles, and also up the Coquille River for about the same distance, is a paradise for the apiarist, and for those who wish to engage in the cultivation of fruits of almost all varieties. Flowers are in bloom every month in the year, and the foot-hills are teeming with berries. This is truly the home of the busy bee, as "the woods are full of them," and it is not an uncommon thing to find cedar trees with from 100 to 200 pounds of honey in them. There are thousands of acres of Government land here, still open to entry.

Bandon, Oreg.

E. G. GROVER.

Fair Prospects for White Clover.

I have 162 colonies of bees, which were placed in the cellar on Nov. 27, and all are doing well. The honey crop was a total failure last year, but we hope for a good crop the coming season. White clover prospects are only fair for this season, on account of the drouth last Summer.

J. V. CALDWELL.

Cambridge, Ills., March 10, 1891.

Thinks a Trade-Mark Necessary.

I am in favor of a trade-mark for the Union, in the form of a stamp, and think the clover blossom would be an appropriate emblem. The name of the Union should be given, and also the name and address of the member using the trade-mark. Each member to have a number, which would be on his stamp, in addition to his name. Let a contract be made with some rubber stamp manufacturer, and the number affixed to each one, in figures, as the orders are sent in, and in this way counterfeiting would be prevented. The stamp would thus serve to advertise each member using it, and be profitable to him for that purpose, also. I have studied the trade-mark question a great deal, and cannot come to any other conclusion, and am convinced that a majority of the members are in favor of its adoption.

Pulaski, Iowa.

E. L. KIRK.

Bees Dying of Starvation.

For the past two weeks the weather has been very severe, the mercury having been as low as 5° below zero, and this morning it had risen to zero. On March 7 snow fell to the depth of 6 inches. I have 60 colonies of bees in fair condition, but they will require to be fed for some time, before the honey flow commences. A great many bees have died of starvation in this vicinity, during the Winter.

GEORGE W. COOK.

Spring Hill, Kans., March 9, 1891.

Plenty of Blossoms, but No Nectar.

From 52 colonies, Spring count, I received only 300 pounds of extracted-honey last season, after feeding 200 pounds of syrup. The Spring was cold and wet, and the bees did not breed up very fast until the latter part of June, but by July 1 they were in good condition for the honey harvest, and I began to pile on the surplus cases, as the clover was blooming profusely. However, no

nectar was secreted by the clover in this locality, and, to my surprise, the supers contained very little honey. I have concluded that either my strain of bees are poor honey gatherers, or the queen-breeders exaggerate, in the reports of their varieties of bees. I purchased several queens during 1889, but their progeny did not gather as much honey as my hybrids. Many persons claim to make bee-keeping a specialty, but a great many of them have some other means of livelihood besides this industry, and in those cases the claim is not valid.

Hageman, Ind.

FRANK STEVENS.

Good Honey Crop and Snow.

This morning it is still snowing, with just one foot of that beautiful covering on the ground. White clover and alsike were both in good condition previous to the storm, and I do not think they will be killed out. My best honey crops have been gathered in seasons following a snow in March.

FRANK COVERDALE.

Welton, Iowa, March 7, 1891.

Weak Colonies the Cause.

I noticed sometime ago a statement, by one of your correspondents, that last year's honey failure was caused by the colonies being too weak to gather a crop. Now, while that may be true in the writer's case, and in other isolated instances, it could hardly hold good over so much of this vast country. Another correspondent claims (page 346) that close spacing is the cause of failure of the honey crop lately. Like the former reason, it could hardly apply to such a large territory as this country, and certainly cannot be true. Here in my locality, the bees did well until the middle of June, when dry weather set in, with hot winds that dried up the nectar in the flowers, continuing all through the season. Large buckwheat fields yielded hardly any honey. Heavy dews here indicate plenty of honey, and *vice versa*.

J. BLACKHALL.

Hobart, Ind.

Bee-Keeping for Profit, by Dr.

G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted-honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25c.



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" 200 colonies (420 pages)	1 50

As there is another firm of "Newman
& Son" in this city, our letters sometimes
get mixed. Please write *American Bee
Journal* on the corner of your envelopes to
save confusion and delay.

The Convention Hand-Book
is very convenient at Bee-Conventions. It
contains a simple Manual of Parliamentary
Law and Rules of Order for Local Bee-
Conventions; Constitution and By-Laws
for a Local Society; Programme for a Con-
vention, with Subjects for Discussion. In
addition to this, there are about 50 blank
pages, to make notes upon, or to write out
questions, as they may come to mind.
They are nicely bound in cloth, and are of
the right size for the pocket. We will
present a copy for one new subscription to
the BEE JOURNAL (with \$1.00 to pay for the
same), or 2 subscribers to the HOME JOURNAL
may be sent instead of one for the BEE
JOURNAL.

The "Farm Poultry" is a 20-page
monthly, published in Boston, at 50 cents
per year. It is issued with a colored cover
and is finely illustrated throughout.

We have arranged to club the AMERICAN
BEE JOURNAL with the *Farm-Poultry* at
\$1.35 per year for the two. Or with the
ILLUSTRATED HOME JOURNAL at \$1.75.

If you have a desire to know
how to have Queens fertilized in upper
stories, while the old Queen is still laying
below—how you may *safely introduce* any
Queen, at any time of the year when bees
can fly—all about the different races of
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about forming nuclei, multiplying or unit-
ing bees, or weak colonies, etc.; or, in fact,
everything about the queen-business which
you may want to know, send for "*Doolittle's
Scientific Queen-Rearing*;" a book of
170 pages, which is nicely bound in cloth,
and is as interesting as a story. Price, \$1.00.
For sale at this office.

When talking about Bees to your
friend or neighbor, you will oblige us by
commending the BEE JOURNAL to him, and
taking his subscription to send with your
renewal. For this work we will present you
with a copy of the Convention Hand-Book-
by mail, postpaid. It sells at 50 cents.

Calvert's No. 1 Phenol, mentioned in
Cheshire's Pamphlet on pages 16 and 17, as
a cure for foul-brood, can be procured at
this office at 25 cents per ounce, by express.

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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both.	Club
The <i>American Bee Journal</i>	\$1 00....	
and Gleanings in Bee-Culture.....	2 00....	1 75
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Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Canadian Bee Journal.....	1 75....	1 65
American Bee-Keeper.....	1 50....	1 40
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Supply Dealers desiring to sell our book, "Bees and Honey," should write for terms before issuing their Catalogues.

The Union or Family Scale has been received, and I am much pleased with it.

W. H. KIMBALL.
Davenport, Iowa.

I am well pleased with the Sewing Machine you sent me; any person wanting a good Sewing Machine, one that is equal to the high-priced machines which are sold by agents, can do no better than to send for your \$15.00 Machine. They will be agreeably surprised when they see it. Mine is really better than I expected.

W. J. PATTERSON.
Sullivan, Ills., Dec. 5, 1890.

The "Globe" Bee Veil

Price, by Mail or Express, \$1.00.



There are five cross-bars united by a rivet through their center at the top. These bars are buttoned to studs on the neck-band. The bars are of best light spring-steel. The neck-band is of best hard spring brass. The cover is of white bobinet with black face-piece to see through.

It is very easily put together; no trouble to put on or take off; and folds compactly in a paper box 6x7 inches, by one inch deep. The protection against bees is perfect—the weight of the entire Veil being only five ounces.

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We will send this Veil and the *Bee Journal* one year for \$1.75. Or, we will give the Veil Free for three (3) New Subscribers to the *Bee Journal*, with \$3.00 to pay for them.

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We send both the *Home Journal* and *Bee Journal* for one year, for \$1.35.

Red Labels are quite attractive for Pails which hold from 1 to 10 lbs. of honey. Price, \$1.00 per hundred, with name and address printed. Sample free.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the *BEE JOURNAL*. Then please call upon them and get them to subscribe with you.

A Nice Pocket Dictionary will be given as a premium for only one new subscriber to this *JOURNAL*, with \$1.00. It is a splendid little Dictionary—just right for the pocket. Price, 25 cents.

We Now Have a full stock of everything needed in the apiary, and can fill orders at a moment's notice. Order before the rush.

HONEY AND BEESWAX MARKET.

DETROIT, March 14.—Comb-honey is quoted at 14@15c; demand light. Extracted, 7@8c. Beeswax in fair demand, 27@28c.

M. H. HUNT, Bell Branch, Mich.

NEW YORK, March 14.—Market is bare of comb-honey. We quote: Extracted, buckwheat, 7@7½c; California, in good demand, at 6½@7¼c, and market well supplied; Southern, none in market. Beeswax, 25@27c.

HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, March 14.—Market continues about the same; stocks becoming light; no receipts. We quote: White 1-lb. comb; at 16@18c; dark, 12@14c; California white, 2-lb., 4@15c; extracted, 6@7c. Beeswax, 22@25c.

CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, March 14.—Demand good for extracted-honey, at 6@8c; comb-honey in fair demand at 15@17c for choice, in a jobbing way. Beeswax is in good demand at 24@26c., for good to choice yellow.

C. F. MUTH & SON,
Corner Freeman & Central Aves.

CHICAGO, Mar. 14.—Demand at present not very active on comb honey. Fancy white, 17c; white, 16c; white, 2-lb. sections, 14c; buckwheat, 1-lb. sections, 12c; extracted, 7@8c. Beeswax, 28c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, Mar. 14.—Fancy white 1-lb. comb, 18c; fair to good, 17c; dark 1-lb., 14@15c; 2-lb. white comb, 15@16c; 2-lb. dark, 13@14c; extracted, white, 7c; dark, 5@6c.

HAMBLIN & BEARSS, 514 Walnut St.

CHICAGO, Mar. 14.—The volume of trade in honey is very small. A few of the best lots are taken at 17@18c; but where the condition and appearance of honey is a little off, 16c is about the top. The supply is not large, but there seems to be about enough for the trade. Extracted, is selling at 7@8c, with fair trade. Beeswax, 27@28c.

R. A. BURNETT, 161 S. Water St.

BOSTON, Mar. 14.—Honey is in fair demand; supply short. Fancy, 1-lb. comb, 19@20c; fair to good, 18@19c; 2-lb. sections, 16@17c. Extracted, 8@9c. There is no beeswax on hand.

BLAKE & RIPLEY, 57 Chatham Street.

ALBANY, N. Y., March 14.—Honey market is slow, with small stocks of comb. We quote: White comb at 15@16c; mixed, 14@15c; dark, 12@13c. Extracted, light, slow at 7@8c; dark, firm at 6c. Beeswax, 26@30c.

H. R. WRIGHT, 326-328 Broadway.

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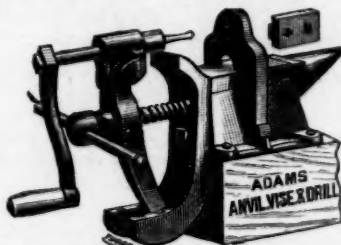
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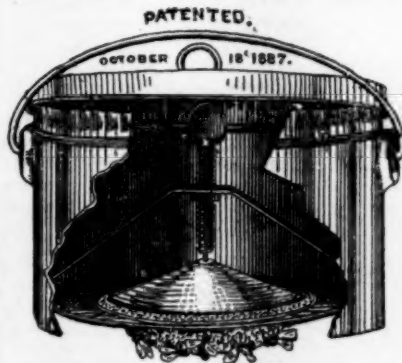
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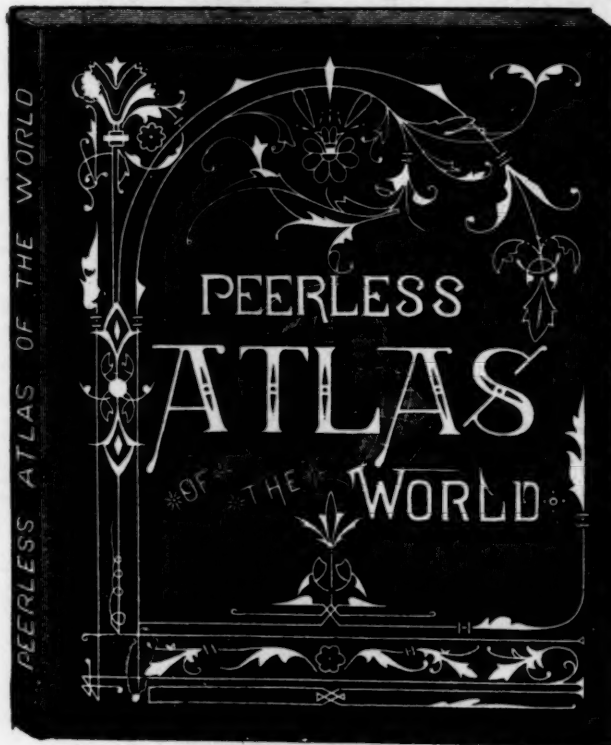
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